**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Classwork 2.1A**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | Rating |  |  |  |
|  |  | **G** | **PG** | **PG-13** | **R** | **total** |
| Movie | **Action** | 4 | 5 | 17 | 9 | 35 |
| type | **Comedy** | 2 | 12 | 20 | 4 | 38 |
|  | **Drama** | 0 | 3 | 8 | 17 | 28 |
|  | **Thriller** | 0 | 0 | 11 | 8 | 19 |
|  | **total** | 6 | 20 | 56 | 38 | 120 |

1. Calculate the marginal distribution of movie type and make a bar graph
2. Calculate the marginal distribution of rating and make a bar graph
3. What percent of movies were Drama?
4. What percent of movies were PG?
5. What percent of PG movies were Comedy?
6. What percent of Thrillers were PG-13?
7. What percent of movies were Action given that they were G rated?
8. If we know a movie is rated R, what is the chance (%) that is was a thriller?
9. What percent of movies are dramas AND rated R?
10. What percent of movies are Action OR rated PG?